

Access DB# 154389

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Barbara R Schwartz Examiner #: 61449 Date: 5/25/05  
Art Unit: 1774 Phone Number ~~30~~ 21528 Serial Number: 0701701  
Mail Box and Bldg/Room Location: 10C75 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Ink Jet Recording Material  
Inventors (please provide full names): Aert, Hubertus; Loccufier, Johan;  
Lingier, Stefan  
Earliest Priority Filing Date: 11/18/02

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search water soluble/dispersible polymers including monomers of I-11 in an ink jet recording context, including the product of the polymer cross-linked with boric acid (see cl 1).

Elected claims are circled.

SCIENTIFIC REFERENCE BR  
Sci & Tech Inf. Ctr.

MAY 25 2005

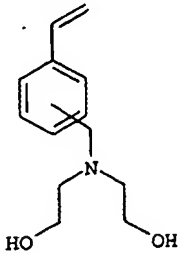
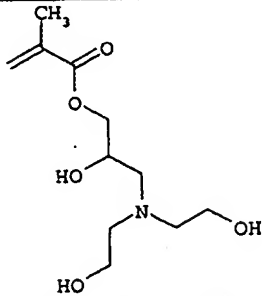
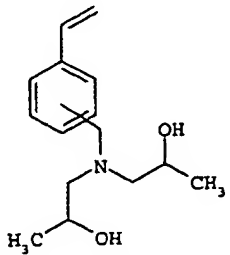
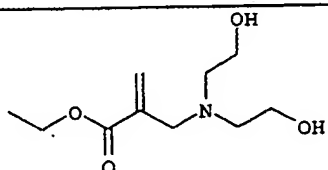
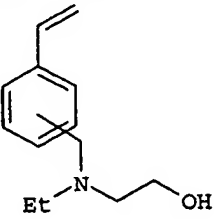
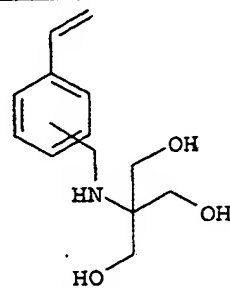
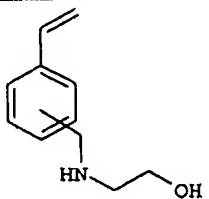
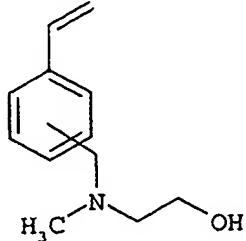
(Structure) search covered everything including elected species - not much out close. Pat. & T.M. Office

## STAFF USE ONLY

Staff Use Only	Type of Search	Vendors and cost where applicable
Searcher: <u>EE</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>6-7-05</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

Illustrative monomers according to formula (I) are given in Table 1 below:

TABLE 1

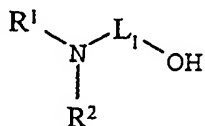
Monomer No.	Structure	Monomer No.	Structure
I-1		I-9	
I-2		I-10	
I-3		<div><div>I-11</div><div>Elected</div></div>	
I-4		I-12	

10/10/701<sup>28</sup>

## WE CLAIM:

1. An ink jet recording material comprising a support and at least one ink receiving layer containing a water-soluble or water-dispersible polymer, wherein said polymer comprises a repeating monomeric unit having a moiety capable of chelating boric acid by means of at least one nitrogen containing functional group and at least one hydroxyl group thereby forming a five- or six-membered ring.

2. Ink jet recording material according to claim 1 wherein said monomeric unit is represented by formula (I):



(I)

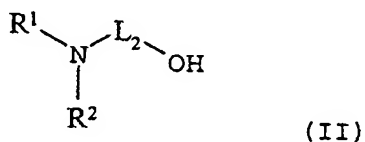
- wherein,  
R<sup>1</sup> and R<sup>2</sup> are selected independently from the group consisting of hydrogen, a substituted or unsubstituted, saturated or unsaturated aliphatic group, a substituted or unsubstituted aryl group, and a substituted or unsubstituted heteroaryl group;  
L<sub>1</sub> represents a linking group containing two or three straight chain carbon atoms which may be further substituted or may be part of a ring;  
any of L<sub>1</sub>, R<sup>1</sup> and R<sup>2</sup> may combine to form a ring, and  
at least one of L<sub>1</sub>, R<sup>1</sup> and R<sup>2</sup> comprises an ethylenically unsaturated polymerizable group.

3. Ink jet recording material according to claim 2 wherein any of L<sub>1</sub>, R<sup>1</sup> and R<sup>2</sup> is substituted by one or more groups comprising one or more additional hydroxyl group, amino groups and amide groups.

4. Ink jet recording material according to claim 1 wherein said polymer comprises at least one other repeating monomeric unit chosen from the list consisting of vinyl acetate, vinyl alcohol, dimethylaminoethyl methacrylate, vinyl amine, vinyl formamide, vinylacetamide, diallyl amine, vinyl versatate, butyral acrylate, styrene, dimethylaminoethyl acrylate, methacryloxyethyltrimethyl ammonium chloride, ethylacrylate, butylmethacrylate, styrene, methyl methacrylate, butyl acrylate,

2-ethylhexyl methacrylate, vinyl amine, diallyldimethyl ammonium chloride, 2-ethylhexyl acrylate, methacryloxyethyl dimethylbenzyl ammonium chloride, acryloxyethyl dimethyl benzyl ammonium chloride, vinyl caprolactam and vinyl pyrrolidone.

- 5 (5) Ink jet recording material according to claim 1 wherein said polymer is a latex.
- 10 (6) Ink jet recording material according to claim 1 wherein said polymer functions as binder.
- (7) Ink jet recording material according to claim 1 wherein said ink receiving layer further comprises a pigment.
- 15 (8) Ink jet recording material according to claim 7 wherein said pigment is an inorganic pigment.
- 20 (9) Ink jet recording material according to claim 8 wherein inorganic pigment is chosen from the group consisting of aluminum oxide, boehmite, pseudo-boehmite, gibbsite, bayerite, aluminum hydroxide, silica, clay, calcium carbonate, zirconia, and mixed inorganic oxides/hydroxides.
- 25 (10) Ink jet recording material according to claim 1 wherein said ink receiving layer further contains a hardener capable of crosslinking said polymer.
- (11) Ink jet recording material according to claim 10 wherein said hardener is boric acid.
- 30 (12) An ink jet recording material comprising a support and at least one ink receiving layer containing a water-soluble or water-dispersible polymer, wherein said polymer comprises a repeating monomeric unit represented by formula (II):



wherein,  
R<sup>1</sup> and R<sup>2</sup> are selected independently from the group consisting of hydrogen, a substituted or unsubstituted, saturated or  
40 unsaturated aliphatic group, a substituted or unsubstituted aryl

group, and a substituted or unsubstituted heteroaryl group;  
L<sub>2</sub> represents a linking group containing two or three carbon  
atoms which may be further substituted or may be part of a ring;  
any of L<sub>2</sub>, R<sup>1</sup> and R<sup>2</sup> may combine to form a ring, and  
5 at least one of L<sub>2</sub>, R<sup>1</sup> and R<sup>2</sup> comprises an ethylenically  
unsaturated polymerizable group.

13. Ink jet recording material according to claim 12, wherein L<sub>2</sub> is  
selected from the group consisting of -CH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-,  
10 -CH<sub>2</sub>CH(CH<sub>3</sub>)-, -CH(CH<sub>3</sub>)CH<sub>2</sub>-, -CH<sub>2</sub>CH(CH<sub>2</sub>OH)-, -CH(CH<sub>2</sub>OH)CH<sub>2</sub>-,  
-CH=CH-, -CH=CHCH<sub>2</sub>-, -C≡CCH<sub>2</sub>-, -CH<sub>2</sub>CH=CH-, -CH<sub>2</sub>C≡C-, -CH=C(CH<sub>3</sub>)-  
and -C(CH<sub>3</sub>)=CH-.

14. Ink jet recording material according to claim 12 wherein any of  
15 L<sub>2</sub>, R<sup>1</sup> and R<sup>2</sup> is substituted by one or more groups comprising one  
or more additional hydroxyl group, amino groups and amide  
groups.

15. Ink jet recording material according to claim 12 wherein said  
20 polymer comprises at least one other repeating monomeric unit  
chosen from the list consisting of vinyl acetate, vinyl alcohol,  
dimethylaminoethyl methacrylate, vinyl amine, vinyl formamide,  
vinylacetamide, diallyl amine, vinyl versatate, butyral  
acrylate, styrene, dimethylaminoethyl acrylate,  
25 methacryloxyethyltrimethyl ammonium chloride, ethylacrylate,  
butylmethacrylate, styrene, methyl methacrylate, butyl acrylate,  
2-ethylhexyl methacrylate, vinyl amine, diallyldimethyl ammonium  
chloride, 2-ethylhexyl acrylate, methacryloxyethyldimethyl-  
benzylammonium chloride, acryloxyethyldimethyl benzyl ammonium  
30 chloride, vinyl caprolactam and vinyl pyrrolidone.

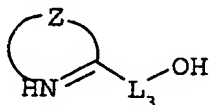
16. Ink jet recording material according to claim 12 wherein said  
polymer is a latex.

17. Ink jet recording material according to claim 12 wherein said  
35 polymer functions as binder.

18. Ink jet recording material according to claim 12 wherein said  
ink receiving layer further comprises a pigment.

19. Ink jet recording material according to claim 18 wherein said  
40 pigment is an inorganic pigment.

20. Ink jet recording material according to claim 19 wherein inorganic pigment is chosen from the group consisting of aluminum oxide, boehmite, pseudo-boehmite, gibbsite, bayerite, aluminum hydroxide, silica, clay, calcium carbonate, zirconia, and mixed inorganic oxides/hydroxides.
21. Ink jet recording material according to claim 12 wherein said ink receiving layer further contains a hardener capable of crosslinking said polymer.
22. Ink jet recording material according to claim 21 wherein said hardener is boric acid.
23. An ink jet recording material comprising a support and at least one ink receiving layer containing a water-soluble or water-dispersible polymer, wherein said polymer comprises a repeating monomeric unit represented by formula (III):



- wherein,
- Z represents the necessary atoms to form a substituted or unsubstituted five- or six-membered heteroring;
- L<sub>3</sub> represents a linking group containing one or two carbon atoms which may be further substituted or may be part of a ring, and at least one of the heteroring or L<sub>3</sub> comprises an ethylenically unsaturated polymerizable group.
24. Ink jet recording material according to claim 23, wherein L<sub>3</sub> is selected from the group consisting of -CH<sub>2</sub>CH<sub>2</sub>-, -CH(CH<sub>3</sub>)-, -CH=CH- and -C≡C-.
25. Ink jet recording material according to claim 23 wherein L<sub>3</sub> is substituted by one or more groups comprising one or more additional hydroxyl group, amino groups and amide groups.
26. Ink jet recording material according to claim 23 wherein a hydrogen atom of L<sub>3</sub> is replaced by a substituted or unsubstituted, saturated or unsaturated aliphatic group, a

substituted or unsubstituted aryl group, and a substituted or unsubstituted heteroaryl group.

27. Ink jet recording material according to claim 23 wherein said  
5 polymer comprises at least one other repeating monomeric unit  
chosen from the list consisting of vinyl acetate, vinyl alcohol,  
dimethylaminoethyl methacrylate, vinyl amine, vinyl formamide,  
vinylacetamide, diallyl amine, vinyl versatate, butyral  
acrylate, styrene, dimethylaminoethyl acrylate,  
10 methacryloxyethyltrimethyl ammonium chloride, ethylacrylate,  
butylmethacrylate, styrene, methyl methacrylate, butyl acrylate,  
2-ethylhexyl methacrylate, vinyl amine, diallyldimethyl ammonium  
chloride, 2-ethylhexyl acrylate, methacryloxyethyldimethyl-  
benzylammonium chloride, acryloxyethyldimethyl benzyl ammonium  
15 chloride, vinyl caprolactam and vinyl pyrrolidone.
28. Ink jet recording material according to claim 23 wherein said  
polymer is a latex.
29. Ink jet recording material according to claim 23 wherein said  
20 polymer functions as binder.
30. Ink jet recording material according to claim 23 wherein said  
ink receiving layer further comprises a pigment.
- 25 31. Ink jet recording material according to claim 30 wherein said  
pigment is an inorganic pigment.
32. Ink jet recording material according to claim 31 wherein  
30 inorganic pigment is chosen from the group consisting of  
aluminum oxide, boehmite, pseudo-boehmite, gibbsite, bayerite,  
aluminum hydroxide, silica, clay, calcium carbonate, zirconia,  
and mixed inorganic oxides/hydroxides.
- 35 33. Ink jet recording material according to any of claims 23 wherein  
said ink receiving layer further contains a hardener capable of  
crosslinking said polymer.
- 40 34. Ink jet recording material according to claim 33 wherein said  
hardener is boric acid.

=> file reg

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=> d his

FILE 'HCAPLUS'

L1 12 S AERT ?/AU  
L2 90 S LOCCUFIER ?/AU  
L3 54 S LINGIER ?/AU  
L4 0 S L1 AND L2 AND L3  
L5 0 S L1 AND L2  
L6 0 S L1 AND L3  
L7 9 S L2 AND L3  
SEL L7 1-9 RN

FILE 'REGISTRY'

L8 158 S E1-E158  
L9 120 S L8 AND N/ELS AND O/ELS  
L10 67 S L9 AND 4/ELC.SUB  
L11 16 S L10 AND 1/N

FILE 'LREGISTRY'

L12 STR

FILE 'REGISTRY'

L13 SCR 970 AND 1700  
L14 SCR 1839  
L15 50 S L12 AND L13 NOT L14  
L16 SCR 1199  
L17 50 S L12 AND L13 NOT (L14 OR L16)  
L18 SCR 1602  
L19 50 S L12 AND L13 NOT (L14 OR L16 OR L18)  
L20 1839 S L12 AND L13 NOT (L14 OR L16 OR L18) FUL  
SAV L20 SCH701/A  
L21 30 S L20 AND PMS/CI  
E BORIC ACID/CN  
L22 2 S E3  
SEL L22 1-2 RN  
EDIT E1-E2 /BI /CRN  
L23 1671 S E1-E2  
L24 0 S L23 AND L20



## FILE 'HCA'

L25 3911 S L20  
 L26 57104 S L22 OR L23 OR BORIC#(A)ACID# OR B(W)OH(W)3 OR H3BO3  
 L27 27 S L21  
 L28 0 S L27 AND L26  
 L29 10 S L25 AND L26

## FILE 'REGISTRY'

E C13H19NO3  
 L30 3349 S E3  
 L31 19 S L30 AND L20  
 E C12H17NO3  
 L32 3426 S E3  
 L33 4 S L32 AND L20

## FILE 'REGISTRY'

=> d l20 que stat

L12 STR

CH2=C N~G1—OH  
 1 2 5 6 7

REP G1=(2-3) CH

NODE ATTRIBUTES:

CONNECT IS M2 RC AT 2

CONNECT IS M2 RC AT 5

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

L13 SCR 970 AND 1700

L14 SCR 1839

L16 SCR 1199

L18 SCR 1602

L20 1839 SEA FILE=REGISTRY SSS FUL L12 AND L13 NOT (L14 OR L16 OR L18)

100.0% PROCESSED 3357 ITERATIONS

1839 ANSWERS

SEARCH TIME: 00.00.01

=> file hca

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=> d 129 1-10 all hitstr

L29 ANSWER 1 OF 10 HCA COPYRIGHT 2005 ACS on STN

AN 139:297121 HCA

ED Entered STN: 30 Oct 2003

TI Ammonium hydrogencarbonate, an excellent buffer for the analysis of basic drugs by liquid chromatography-mass spectrometry at high pH

AU Espada, Alfonso; Rivera-Sagredo, Alfonso

CS European Analytical Technologies, DCR&T Alcobendas, Lilly S.A., Alcobendas, 28108, Spain

SO Journal of Chromatography, A (2003), 987(1-2), 211-220

CODEN: JCRAEY; ISSN: 0021-9673

PB Elsevier Science B.V.

DT Journal

LA English

CC 64-3 (Pharmaceutical Analysis)

AB Ammonium hydrogencarbonate buffer has been found to be esp. useful for high-pH HPLC anal. of samples from both combinatorial and medicinal chem. sources. Satisfactory results were obtained by the std. diode array, evaporative light-scattering, and MS detection by using this buffer at a concn. of 10 mM. From a practical standpoint, ammonium hydrogencarbonate is an ideal buffer for chromatog. since it provides excellent chromatog. behavior and reproducible sepn. In addn. to this, its volatility makes it an essential tool for rapid LC-MS product identification. Ammonium hydrogencarbonate was tested for a no. of drug-like compds. analyzed as mixts., and data obtained were compared to those from the classical and MS-friendly buffers widely used by chromatog.: trifluoroacetic and formic acids. The results of this study revealed the suitability of this buffer for routine HPLC application in research labs.

ST drug sepn HPLC MS solvent effect; liq chromatog sepn basic drug

IT Buffers

HPLC

Mass spectrometry

Pharmaceutical analysis

Solvent effect

(sepn. of basic drugs by HPLC using mass spectroscopy detection and buffer system optimization)

- IT 51-06-9, Procainamide 52-53-9, Verapamil 58-32-2, Dipyridamole  
525-66-6, Propranolol 3416-26-0, Lidoflazine 6452-71-7,  
Oxprenolol 13523-86-9, Pindolol 21829-25-4, Nifedipine  
42399-41-7, Diltiazem 52468-60-7, Flunarizine  
(sepn. of basic drugs by HPLC using mass spectroscopy detection  
and buffer system optimization)
- IT 56-40-6, Glycine, analysis 77-86-1, Tris buffer 109-02-4,  
4-Methylmorpholine 109-89-7, Diethylamine, analysis 121-44-8,  
Triethylamine, analysis 123-75-1, Pyrrolidine, analysis  
463-79-6, Carbonic acid, analysis 626-67-5, 1-Methylpiperidine  
1066-33-7, Ammonium hydrogencarbonate 7664-41-7, Ammonia, analysis  
**10043-35-3, Boric acid**, analysis  
(sepn. of basic drugs by HPLC using mass spectroscopy detection  
and buffer system optimization)

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

- (1) Bosch, G; personal communication 2000
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- (29) Vervoort, R; J Chromatogr A 2001, V931, P67 HCA
- (30) Wehr, T; LC.cntdot.GC North Am 2002, V1, P40
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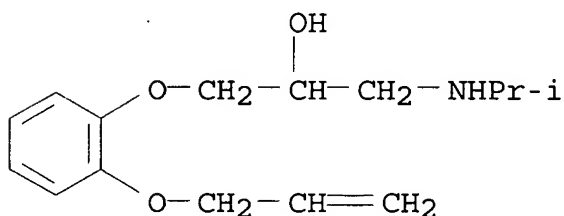
(33) Zhao, J; J Mass Spectrom 2002, V37, P421 HCA

IT 6452-71-7, Oxprenolol

(sepn. of basic drugs by HPLC using mass spectroscopy detection  
and buffer system optimization)

RN 6452-71-7 HCA

CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyloxy)phenoxy]-  
(9CI) (CA INDEX NAME)

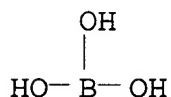


IT 10043-35-3, Boric acid, analysis

(sepn. of basic drugs by HPLC using mass spectroscopy detection  
and buffer system optimization)

RN 10043-35-3 HCA

CN Boric acid (H<sub>3</sub>BO<sub>3</sub>) (6CI, 8CI, 9CI) (CA INDEX NAME)



L29 ANSWER 2 OF 10 HCA COPYRIGHT 2005 ACS on STN

AN 137:15223 HCA

ED Entered STN: 04 Jul 2002

TI Quantitative determination of oxprenolol and timolol in urine by  
capillary zone electrophoresis

AU Maguregui, M. I.; Jimenez, R. M.; Alonso, R. M.; Akesolo, U.

CS Departamento de Pintura, Facultad de Bellas Artes, Universidad del  
Pais Vasco, Bilbao, 48080, Spain

SO Journal of Chromatography, A (2002), 949(1-2), 91-97

CODEN: JCRAEY; ISSN: 0021-9673

PB Elsevier Science B.V.

DT Journal

LA English

CC 1-1 (Pharmacology)

Section cross-reference(s): 64

AB A simple capillary zone electrophoretic method with UV detection was  
developed for the quant. detn. of the .beta.-adrenoreceptor  
antagonists (.beta.-blockers) oxprenolol and timolol in human urine,  
preceded by a solid-phase extn. step. The electrophoretic sepn. was

performed on a 78 cm.times.75 .mu.m I.D. fused-SiO2 capillary (effective capillary length: 70 cm). The electrolyte consisted of a Na2B4O7-H3BO3 (50 mM), pH 9. The introduction of the sample was made hydrostatically for 20 s and the running voltage 25 kV at the injector end of the capillary. Photometric detection was used at a wavelength of 229 nm for oxprenolol and 280 nm for timolol. Under these conditions oxprenolol migrated at 4.76 +/- 0.05 min and timolol at 4.97 +/- 0.05 min. The solid-phase extn. methods were optimized for each .beta.-blocker and provided recoveries of 72.8% for timolol and 94.52% for oxprenolol. Good resolu. from the endogenous compds. present in the urine matrix were achieved for both compds. The method was applied to the detn. of both .beta.-blockers in pharmaceutical formulations and urine samples obtained from hypertensive patients after the ingestion of a therapeutic dose (in a 24-h time interval after the ingestion). The quant. results were compared with results previously obtained at the authors' labs. by HPLC and are in good agreement. Good reproducibility, linearity, accuracy and quantitation limits (in urine) of 0.19 .mu.g/mL for timolol and 0.20 .mu.g/mL for oxprenolol were obtained, allowing the method to be applied to pharmacokinetic studies of these compds.

ST oxprenolol timolol detn urine pharmaceutical CZE

IT Capillary zone electrophoresis

Urine analysis

(quant. detn. of oxprenolol and timolol in urine by capillary zone electrophoresis)

IT 26921-17-5, Blocadren 263412-94-8, Transitensin

(quant. detn. of oxprenolol and timolol in urine and pharmaceuticals by capillary zone electrophoresis)

IT 6452-71-7, Oxprenolol 26839-75-8, Timolol

(quant. detn. of oxprenolol and timolol in urine by capillary zone electrophoresis)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

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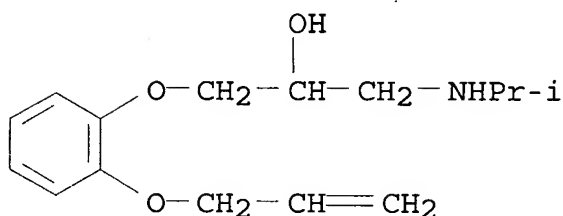
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IT 6452-71-7, Oxprenolol

(quant. detn. of oxprenolol and timolol in urine by capillary zone electrophoresis)

RN 6452-71-7 HCA

CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyloxy)phenoxy]-(9CI) (CA INDEX NAME)



L29 ANSWER 3 OF 10 HCA COPYRIGHT 2005 ACS on STN  
 AN 133:301171 HCA  
 ED Entered STN: 09 Nov 2000  
 TI Compositions and methods for improved delivery of ionizable hydrophobic therapeutic agents  
 IN Chen, Feng-jing; Patel, Manesh V.  
 PA Lipocine, Inc., USA  
 SO PCT Int. Appl., 99 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K009-14  
 ICS A61K009-48; A61K009-64; A61K009-66; A01N025-00  
 CC 63-6 (Pharmaceuticals)  
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WO 2000059475	A1	20001012	WO 2000-US7342	

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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO,

RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,  
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6383471 B1 20020507 US 1999-287043

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CA 2366702 AA 20001012 CA 2000-2366702

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EP 1165048 A1 20020102 EP 2000-916547

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
 PT, IE, SI, LT, LV, FI, RO

PRAI US 1999-287043 A 19990406

WO 2000-US7342 W 20000316

# CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000059475	ICM	A61K009-14
	ICS	A61K009-48; A61K009-64; A61K009-66; A01N025-00
WO 2000059475	ECLA	A61K009/107D; A61K047/02
US 6383471	NCL	424/045.000; 424/046.000; 424/401.000; 424/436.000; 424/451.000; 514/944.000
	ECLA	A61K009/107D; A61K047/02

AB The present invention is directed to a pharmaceutical compn. including a hydrophobic therapeutic agent having at least one ionizable functional group, and a carrier. The carrier includes an ionizing agent capable of ionizing the functional group, a surfactant, and optionally solubilizers, triglycerides, and neutralizing agents. The invention further relates to a method of prepg. such compns. by providing a compn. of an ionizable hydrophobic therapeutic agent, an ionizing agent, and a surfactant, and neutralizing a portion of the ionizing agent with a neutralizing agent. The compns. of the invention are particularly suitable for use in oral dosage forms. A carrier contg. concd. phosphoric acid 0.025, Tween-20 0.3, Arlacel 186 0.2, sodium taurocholate 0.15, propylene glycol 0.3 g was formulated. Itraconazole was included in the carrier at 30 mg/mL for testing the stability of the itraconazole soln. upon diln. in simulated gastric fluid.

ST hydrophobic drug carrier base surfactant triglyceride

IT Diglycerides

Diglycerides

Diglycerides

Glycerides, biological studies

Glycerides, biological studies

- Glycerides, biological studies
  - Monoglycerides
  - Monoglycerides
  - Monoglycerides
    - (C8-10 monoglycerides and diglycerides; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Fatty acids, biological studies
  - (C8-10, esters with propylene glycol; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Glycerides, biological studies
  - (C8-10, ethoxylated; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Glycerides, biological studies
  - (C8-10; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Hydroquinones
  - (Hydroquinosulfonic acid; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Monoglycerides
  - (acetates, with C6 to C20 fatty acid; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems
  - (aerosols; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Amines, biological studies
  - (aliph.; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Sulfonates
  - (alkanesulfonates; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Phenols, biological studies
  - (alkyl, ethoxylated; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Glycosides
  - (alkyl, maltosides; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Fats and Glyceridic oils, biological studies



- (almond, ethoxylated; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Sulfones  
(amino; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Heterocyclic compounds  
Heterocyclic compounds  
(arom., hydroxy; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Amines, biological studies  
(arom.; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(capsules; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(carriers; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Glycerides, biological studies  
(corn, ethoxylated, Crovol M 40 and Crovol M 70; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Fatty acids, biological studies  
(essential; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Fatty acids, biological studies  
(esters, with polyglycerol; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Amino acids, biological studies  
(esters; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Carbohydrates, biological studies  
(ethers; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Castor oil  
(ethoxylated, Incrocas 35 and Incrocas 40; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)

- IT Sterols  
(ethoxylated; Nikkol BPS-30, pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Corn oil  
Fatty acids, biological studies  
Glycerides, biological studies  
Olive oil  
Palm kernel oil  
Peanut oil  
Sterols  
(ethoxylated; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(gels; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Aromatic compounds  
Aromatic compounds  
(heterocyclic, hydroxy; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Amines, biological studies  
(heterocyclic; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Castor oil  
(hydrogenated, ethoxylated, Cremophor RH 40; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Castor oil  
Palm kernel oil  
(hydrogenated, ethoxylated; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Surfactants  
(hydrophilic; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Surfactants  
(hydrophobic; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Minerals, biological studies  
(hydrotalcite-group; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)

- IT Acids, biological studies  
(inorg.; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Surfactants  
(ionic; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(lotions; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(mucosal; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Fatty acids, biological studies  
(non-essential; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Surfactants  
(nonionic; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(ointments, creams; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(ointments; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(ophthalmic; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(oral; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Acids, biological studies  
(org.; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Glycerides, biological studies  
(palm kernel-oil, ethoxylated, Crovol PK 70; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)

- IT Drug delivery systems  
(parenterals; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(pastes; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Surfactants  
(pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Alcohols, biological studies  
Amino acids, biological studies  
Bile salts  
Carboxylic acids, biological studies  
Diglycerides  
Phenols, biological studies  
Phospholipids, biological studies  
Soybean oil  
Sulfonamides  
Sulfonates  
Sulfonic acids, biological studies  
Sulfonylureas  
Tannins  
Thiols (organic), biological studies  
(pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Sterols  
(phyto; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Alcohols, biological studies  
(polyhydric, reaction products; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Alcohols, biological studies  
(polyhydric, solubilizer; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(pulmonary; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(rectal; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and

- triglycerides)
- IT Fatty acids, biological studies  
(salts; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(solns., oral; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Amides, biological studies
- Esters, biological studies
- Polyoxyalkylenes, biological studies  
(solubilizer; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Sterols  
(soya, ethoxylated; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(sprays; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Carbohydrates, biological studies  
(sugar esters; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(suppositories; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(topical; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(transdermal; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Drug delivery systems  
(vaginal; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Fats and Glyceridic oils, biological studies  
(vegetable, ethoxylated; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Fats and Glyceridic oils, biological studies

- (vegetable, hydrogenated, Sterotex NF; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT Glycerides, biological studies  
Monoglycerides  
(with C6 to C20 fatty acid; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT 53824-77-4, Propylene glycol dicaprate  
(Captex 100; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT 9004-96-0, Polyethylene glycol monooleate  
(Crodet O 40, Kessco PEG 1000MO; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT 79665-92-2, Hexaglycerol monooleate  
(Drempol 6-10; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT 9004-81-3, Kessco PEG 1000ML  
(Kessco PEG 1000ML and Mapeg 200ML; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT 9005-02-1, Polyethylene glycol dilaurate  
(Kessco PEG 1540DL; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT 9005-07-6, Polyethylene glycol dioleate  
(Kessco PEG 1540DO; pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)
- IT 50-06-6, Phenobarbital, biological studies 50-21-5, biological studies 50-21-5D, Lactic acid, glycerides 50-44-2, Mercaptopurine 50-48-6, Amitriptyline 50-52-2, Thioridazine 50-53-3, Chlorpromazine, biological studies 50-55-5, Reserpine 50-78-2 50-81-7, Ascorbic acid, biological studies 51-48-9, Levothyroxine, biological studies 51-52-5, Propylthiouracil 51-55-8, Atropine, biological studies 51-64-9, Dexamphetamine 52-86-8, Haloperidol 53-86-1, Indomethacin 54-05-7, Chloroquine 54-11-5, Nicotine 54-31-9 56-54-2, Quinidine 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 57-22-7, Vincristine 57-27-2, Morphine, biological studies 57-41-0, Phenytoin 57-43-2, Amylobarbitol 57-44-3, Barbitol 57-47-6, Physostigmine 57-66-9, Probenecid 57-88-5, Cholesterol, biological studies 58-14-0, Pyrimethamine 58-25-3, Chlordiazepoxide 58-32-2, Dipyrindamole 58-38-8, Prochlorperazine 58-39-9, Perphenazine 58-54-8, Ethacrynic acid 58-73-1,

Diphenhydramine 58-94-6, Chlorothiazide 59-05-2, Methotrexate 59-66-5, Acetazolamide 59-87-0, Nitrofurazone 59-96-1, Phenoxybenzamine 61-56-3, Sulthiame 61-68-7, Mefenamic acid 61-72-3, Cloxacillin 64-18-6, Formic acid, biological studies 64-19-7, Acetic acid, biological studies 64-77-7, Tolbutamide 65-85-0, Benzoic acid, biological studies 66-76-2, Dicumarol 66-79-5, Oxacillin 67-20-9, Nitrofurantoin 68-04-2, Sodium Citrate 68-11-1, Thioglycolic acid, biological studies 68-35-9, Sulfadiazine 69-23-8, Fluphenazine 69-72-7, biological studies 69-93-2, Uric acid, biological studies 72-44-6, Methaqualone 72-69-5, Nortriptyline 74-55-5, Ethambutol 75-75-2, Methanesulfonic acid 76-57-3, Codeine 76-74-4, Pentobarbital 76-99-3, Methadone 77-28-1, Butobarbital 77-36-1, Chlorthalidone 77-86-1, Tromethamine 77-92-9, biological studies 79-09-4, Propanoic acid, biological studies 79-10-7, Acrylic acid, biological studies 82-92-8, Cyclizine 83-68-1, Vitamin K6 83-69-2, Vitamin K7 83-70-5, Vitamin K5 83-89-6, Mepacrine 86-21-5, Pheniramine 86-22-6, Brompheniramine 86-35-1, Ethotoin 86-42-0, Amodiaquine 87-69-4, biological studies 89-57-6, Mesalamine 89-65-6, Isoascorbic acid 90-82-4, Pseudoephedrine 90-84-6, Diethylpropion 94-20-2, Chlorpropamide 97-23-4, Dichlorophen 99-66-1, Valproic acid 101-31-5, Hyoscyamine 102-71-6, biological studies 104-15-4, p-Toluenesulfonic acid, biological studies 107-15-3, 1,2-Ethanediamine, biological studies 107-92-6, Butyric acid, biological studies 110-15-6, Butanedioic acid, biological studies 110-16-7, 2-Butenedioic acid (2Z)-, biological studies 110-17-8, Fumaric acid, biological studies 110-27-0, Isopropyl myristate 111-03-5, Glyceryl monooleate 111-62-6, Ethyl Oleate 111-90-0, Transcutol 112-80-1, Oleic acid, biological studies 113-15-5, Ergotamine 113-45-1, Methylphenidate 113-59-7, Chlorprothixene 113-92-8 114-07-8, Erythromycin 115-38-8, Methylphenobarbital 117-89-5, Trifluoperazine 121-44-8, biological studies 122-09-8, Phentermine 122-20-3, Triisopropanolamine 124-04-9, Hexanedioic acid, biological studies 125-28-0, Dihydrocodeine 125-53-1, Oxyphencyclimine 125-84-8, Aminoglutethimide 127-09-3, Sodium Acetate 127-33-3, Demeclocycline 127-69-5, Sulfafurazole 127-71-9, Sulfabenzamide 127-79-7, Sulfamerazine 128-13-2, Ursodeoxycholic acid 128-37-0, Butylated Hydroxytoluene, biological studies 129-03-3, Cyproheptadine 129-20-4, Oxyphenbutazone 130-95-0, Quinine 132-17-2, Benztropine 138-36-3, p-Bromophenylsulfonic acid 139-33-3, Edetate Disodium 141-43-5, biological studies 142-18-7, Glyceryl monolaurate 142-91-6, Isopropyl palmitate 143-07-7, Lauric acid, biological studies 144-11-6, Benzhexol 144-55-8, Sodium hydrogen carbonate, biological studies 144-62-7, Ethanedioic acid, biological studies 144-80-9, Sulfacetamide 144-83-2, Sulfapyridine 145-42-6, Taurocholic acid, sodium salt 146-22-5, Nitrazepam 146-54-3,

Fluopromazine 148-79-8, Thiabendazole 151-21-3, Sodium Dodecyl Sulfate, biological studies 154-42-7, Thioguanine 190-39-6, Bisanthene 288-14-2, Isoxazole 298-57-7, Cinnarizine 299-42-3, Ephedrine 300-62-9, Amphetamine 302-79-4, Tretinoin 305-03-3, Chlorambucil 321-64-2, Tacrine 359-83-1, Pentazocine 361-37-5, Methysergide 364-62-5, Metoclopramide 389-08-2 396-01-0, Triamterene 404-86-4, Capsaicin 437-38-7, Fentanyl 439-14-5, Diazepam 442-52-4, Clemizole 443-48-1, Metronidazole 446-86-6, Azathioprine 458-24-2, Fenfluramine 463-79-6, Carbonic acid, biological studies 471-34-1, Calcium carbonate, biological studies 486-16-8, Carbinoxamine 500-92-5, Proguanil 511-12-6, Dihydroergotamine 514-65-8, Biperiden 519-23-3, Ellipticine 522-00-9, Ethopropazine 523-87-5, Dimenhydrinate 525-66-6 526-95-4, D-Gluconic acid 536-33-4, Ethionamide 537-21-3, Chlorproguanil 544-35-4, Ethyl linoleate 544-63-8, Myristic acid, biological studies 548-73-2, Droperidol 561-27-3, Diamorphine 564-25-0, Doxycycline 569-65-3, Meclozine 577-11-7, Docusate sodium 599-79-1, Sulfasalazine 603-50-9, Bisacodyl 604-75-1, Oxazepam 631-61-8, Ammonium Acetate 644-62-2, Meclofenamic acid 657-24-9, Metformin 668-94-0, 4,5-Diphenylimidazole 671-16-9, Procarbazine 723-46-6, Sulfamethoxazole 738-70-5, Trimethoprim 739-71-9, Trimipramine 745-65-3, Alprostadil 768-94-5, Amantadine 846-49-1, Lorazepam 846-50-4, Temazepam 848-75-9, Lormetazepam 865-21-4, Vinblastine 911-45-5, Clomiphene 915-30-0, Diphenoxylate 961-71-7, Phenbenzamine 968-81-0, Acetohexamide 1134-47-0, Baclofen 1156-19-0, Tolazamide 1309-42-8, Magnesium hydroxide 1310-58-3, Potassium Hydroxide, biological studies 1310-73-2, Sodium Hydroxide, biological studies 1327-43-1, Magnesium aluminum silicate 1330-80-9, Propylene glycol oleate 1333-28-4, Undecenoic acid 1335-30-4, Aluminum silicate 1336-21-6, Ammonium Hydroxide 1338-39-2, Sorbitan monolaurate 1338-41-6, Sorbitan monostearate 1338-43-8, Sorbitan monooleate 1400-61-9, Nystatin 1404-90-6, Vancomycin 1406-05-9, Penicillin 1508-75-4, Tropicamide 1553-60-2, Ibuprofen 1622-61-3, Clonazepam 1622-62-4, Flunitrazepam 1812-30-2, Bromazepam 1951-25-3, Amiodarone 1972-08-3, Dronabinol 2022-85-7, Flucytosine 2030-63-9, Clofazimine 2062-78-4, Pimozide 2078-54-8, Propofol 2447-57-6, Sulfadoxine 2487-39-0, Vitamin K-S (II) 2515-61-9, 1,5-Diphenylpyrazoline 2609-46-3, Amiloride 2709-56-0, Flupentixol 2898-12-6, Medazepam 2998-57-4, Estramustine 3056-17-5, Stavudine 3116-76-5, Dicloxacillin (pharmaceutical compns. contg. hydrophobic therapeutic agents and carriers contg. ionizing agents and surfactants and triglycerides)

IT 3239-44-9, Dexfenfluramine 3737-09-5, Disopyramide 4117-33-3, Lysine Ethyl Ester 4342-03-4, Dacarbazine 4759-48-2, Isotretinoin 5002-47-1, Fluphenazine decanoate 5036-02-2,



Tetramisole 5051-62-7, Guanabenz 5104-49-4, Flurbiprofen 5306-85-4, Dimethyl Isosorbide 5588-33-0, Mesoridazine 5633-20-5, Oxybutynin 5786-21-0, Clozapine 6452-71-7, Oxprenolol 6493-05-6, Pentoxifylline 6506-37-2, Nimorazole 7087-68-5, Diisopropylethylamine 7261-97-4, Dantrolene 7416-34-4, Molindone 7647-01-0, Hydrochloric Acid, biological studies 7664-38-2, Phosphoric acid, biological studies 7664-38-2D, Phosphoric acid, esters, biological studies 7664-93-9, Sulfuric acid, biological studies 7681-93-8, Natamycin 7689-03-4, Camptothecin 7697-37-2, Nitric acid, biological studies 7778-53-2, Potassium Phosphate 8007-43-0, Sorbitan sesquioleate 8045-34-9, Pentaerythritol stearate 9002-92-0, Polyoxyethylene lauryl ether 9002-93-1 9002-96-4, D-.alpha.-Tocopheryl polyethylene glycol succinate 9004-74-4, Methoxy polyethylene glycol 9004-95-9, Polyethylene glycol cetyl ether 9004-98-2, Polyoxyethylene oleyl ether 9004-99-3, Myrj 51 9005-00-9, Polyoxyethylene stearyl ether 9005-08-7, Polyethylene glycol distearate 9005-32-7, Alginic acid 9005-64-5, Polysorbate 20 9005-65-6, Polysorbate 80 9005-66-7, Tween 40 9005-67-8, Tween 60 9007-48-1, Polyglyceryl oleate 9011-21-6 9011-29-4 9014-67-9, Aloxiprin 9016-45-9 9062-73-1, Polyethylene glycol sorbitan laurate 9062-90-2, Polyethylene glycol sorbitan oleate 10034-85-2, Hydriodic acid 10035-10-6, Hydrobromic acid, biological studies 10043-35-3, **Boric acid**, biological studies 10238-21-8 10262-69-8, Maprotiline 10457-90-6, Bromperidol 10540-29-1, Tamoxifen 11140-04-8, Imwitor 988 12633-72-6, Amphotericin 12772-47-3, Pentaerythritol oleate 13292-46-1, Rifampin 13392-28-4, Rimantadine 13523-86-9 **13655-52-2**, Alprenolol 14028-44-5, Amoxapine 14611-51-9, Selegiline 14808-79-8, Sulfate, biological studies 15307-86-5, Diclofenac 15574-96-6, Pizotifen 15676-16-1, Sulpiride 15686-51-8, Clemastine 15686-71-2, Cephalixin 15686-83-6, Pyrantel 15687-27-1, Ibuprofen 16110-51-3, Cromoglicic acid 16773-42-5, Ornidazole 17560-51-9, Metolazone 17617-23-1, Flurazepam 18016-80-3, Lysuride 18507-89-6, Decoquinat 18559-94-9, Albuterol 19216-56-9, Prazosin 19387-91-8, Tinidazole 19794-93-5, Trazodone 20594-83-6, Nalbuphine 21187-98-4, Gliclazide 21256-18-8, Oxaprozin 21645-51-2, Aluminum hydroxide, biological studies 21738-42-1, Oxamniquine 21829-25-4, Nifedipine 22071-15-4, Ketoprofen 22131-79-9, Alclofenac 22204-53-1 22232-71-9, Mazindol 22494-42-4, Diflunisal 22882-95-7, Isopropyl linoleate 22916-47-8, Miconazole 22994-85-0, Benznidazole 23031-25-6, Terbutaline 23110-15-8, Fumagillin 23288-49-5, Probucol 23593-75-1, Clotrimazole 24219-97-4, Mianserin 25339-99-5, Sucrose monolaurate 25523-97-1, Dexchlorpheniramine 25614-03-3, Bromocriptine 25637-84-7, Glyceryl dioleate 25637-97-2, Sucrose dipalmitate 25812-30-0,

Gemfibrozil 25953-19-9, Cefazolin 26097-80-3, Cambendazole 26171-23-3, Tolmetin 26266-57-9, Sorbitan monopalmitate 26266-58-0, Sorbitan trioleate 26402-22-2, Glyceryl monocaprate 26402-26-6, Glyceryl monocaprylate 26446-38-8, Sucrose monopalmitate 26658-19-5, Sorbitan tristearate 26839-75-8, Timolol 26912-41-4D, Polyethylene glycol caprate, glycerides 27195-16-0, Sucrose distearate 27203-92-5, Tramadol 27220-47-9, Econazole 27321-96-6, Polyethylene glycol cholesterol 27638-00-2, Glyceryl dilaurate 28395-03-1, Bumetanide 28657-80-9, Cinoxacin 28911-01-5, Triazolam 28981-97-7, Alprazolam 29094-61-9, Glipizide 29122-68-7, Atenolol 29679-58-1, Fenoprofen 29767-20-2, Teniposide 30299-08-2, Clinofibrate 30909-51-4, Flupentixol decanoate 31431-39-7, Mebendazole 31692-85-0, Glycofurool 33419-42-0, Etoposide 33671-46-4, Clotiazepam 33940-98-6 34406-66-1, Nikkol Decaglyn 1L 34580-13-7, Ketotifen 34911-55-2, Bupropion 36322-90-4, Piroxicam 36330-85-5, Fenbufen 36354-80-0, Glyceryl dicaprylate 36531-26-7, Oxantel 36894-69-6, Labetalol 37148-27-9, Clenbuterol 37220-82-9, ARLACEL 186 37318-31-3, Crodesta F-160 37321-62-3, Lauroglycol FCC 37517-30-9, Acebutolol 38194-50-2, Sulindac 38304-91-5, Minoxidil 38821-53-3, Cephadrine 39366-43-3, Magnesium aluminum hydroxide 41340-25-4, Etodolac 41859-67-0, Bezafibrate 42200-33-9, Nadolol 42399-41-7, Diltiazem 42766-91-6, Nikkol DHC 43200-80-2, Zopiclone 43210-67-9, Fenbendazole 50679-08-8, Terfenadine 51192-09-7, Nikkol TMGO 5 51264-14-3, Amsacrine 51322-75-9, Tizanidine 51384-51-1, Metoprolol 51481-61-9, Cimetidine 51803-78-2 51938-44-4, Sorbitan sesquistearate 52081-33-1, Mitomycins 52468-60-7, Flunarizine 52504-24-2, Softigen 767 52581-71-2, Volpo 3 52942-31-1, Etoperidone 53168-42-6, Myvacet 9-45 53179-11-6, Loperamide 53230-10-7, Mefloquine 53716-50-0, Oxfendazole 53988-07-1, Glyceryl dicaprate 54029-12-8, Ricobendazole 54143-55-4, Flecainide 54340-58-8, Meptazinol 54392-26-6, Sorbitan monoisostearate 54910-89-3, Fluoxetine 55142-85-3, Ticlopidine 55268-74-1, Praziquantel 55985-32-5, Nicardipine 57107-95-6 57307-93-4, Pentaerythritol caprylate 57801-81-7, Brotizolam 57808-66-9, Domperidone 58581-89-8, Azelastine 59467-70-8, Midazolam 59729-33-8, Citalopram 60142-96-3, Gabapentin 60607-34-3, Oxatomide 60719-84-8, Amrinone 61318-90-9, Sulconazole 61379-65-5, Rifapentine 61869-08-7 62013-04-1, Dirithromycin 62571-86-2, Captopril 63590-64-7, Terazosin 63675-72-9, Nisoldipine 64211-45-6, Oxiconazole 64221-86-9, Imipenem 64840-90-0, Eperisone 64872-76-0, Butoconazole 65271-80-9, Mitoxantrone 65277-42-1, Ketoconazole 65899-73-2, Tioconazole 66085-59-4, Nimodipine 66357-35-5, Ranitidine 67227-56-9, Fenoldopam 67352-02-7 67915-31-5, Terconazole 68506-86-5, Vigabatrin 68844-77-9, Astemizole 68958-64-5, Polyethylene glycol glyceryl trioleate

68993-42-0D, Polyethylene glycol caprylate, glycerides 69070-98-0  
 69756-53-2, Halofantrine 70458-96-7, Norfloxacin 71125-38-7,  
 Meloxicam 71486-22-1, Vinorelbine 72432-03-2, Miglitol  
 72509-76-3, Felodipine 72559-06-9, Rifabutin 72803-02-2,  
 Darodipine 73590-58-6, Omeprazole 74011-58-8, Enoxacin  
 74103-06-3, Ketorolac 74191-85-8, Doxazosin 74504-64-6,  
 Polyglyceryl laurate 75330-75-5, Lovastatin 75695-93-1,  
 Isradipine 75706-12-6, Leflunomide

(pharmaceutical compns. contg. hydrophobic therapeutic agents and  
 carriers contg. ionizing agents and surfactants and  
 triglycerides)

IT 75847-73-3, Enalapril 76009-37-5 76547-98-3, Lisinopril  
 76584-70-8 76824-35-6, Famotidine 76963-41-2, Nizatidine  
 77671-31-9, Enoximone 78273-80-0, Roxatidine 79617-96-2,  
 Sertraline 79665-93-3, Nikkol Decaglyn 10 79665-94-4  
 79794-75-5, Loratadine 80214-83-1, Roxithromycin 81093-37-0,  
 Pravastatin 81098-60-4, Cisapride 81103-11-9, Clarithromycin  
 82159-09-9, Epalrestat 82419-36-1, Ofloxacin 82626-48-0,  
 Zolpidem 82664-20-8, Flurithromycin 83366-66-9, Nefazodone  
 83799-24-0, Fexofenadine 83881-51-0, Cetirizine 83905-01-5,  
 Azithromycin 84057-84-1, Lamotrigine 84449-90-1, Raloxifene  
 84625-61-6, Itraconazole 85441-61-8, Quinapril 85721-33-1,  
 Ciprofloxacin 86386-73-4, Fluconazole 86541-75-5, Benazepril  
 87718-67-0, Spiramycins 87848-99-5, Acrivastine 88150-42-9,  
 Amlodipine 89778-26-7, Toremfifene 91161-71-6, Terbinafine  
 91374-21-9, Ropinirole 91714-94-2, Bromfenac 93106-60-6,  
 Enrofloxacin 93390-81-9, Fosphenytoin 93413-69-5, Venlafaxine  
 93479-97-1, Glimepiride 93957-54-1, Fluvastatin 94423-19-5  
 94555-53-0 95233-18-4, Atovaquone 97322-87-7, Troglitazone  
 97682-44-5, Irinotecan 98048-97-6, Fosinopril 98079-51-7  
 98913-68-9, Pentaerythritol isostearate 99614-02-5, Ondansetron  
 100986-85-4, Levofloxacin 101828-21-1, Butenafine 102051-00-3,  
 Nikkol Decaglyn 30 103177-37-3, Pranlukast 103577-45-3,  
 Lansoprazole 103628-46-2, Sumatriptan 104632-26-0, Pramipexole  
 105979-17-7, Benidipine 106133-20-4, Tamsulosin 106266-06-2,  
 Risperidone 106392-12-5, Polyoxyethylene-polyoxypropylene block  
 copolymer 106650-56-0, Sibutramine 107753-78-6, Zafirlukast  
 109889-09-0, Granisetron 110871-86-8, Sparfloxacin 111025-46-8,  
 Pioglitazone 111974-69-7, Quetiapine 113665-84-2, Clopidogrel  
 114798-26-4, Losartan 115103-54-3, Tiagabine 115956-12-2,  
 Dolasetron 117976-89-3, Rabeprazole 119914-60-2, Grepafloxacin  
 120014-06-4, Donepezil 121548-04-7, Gelucire 44/14 121548-05-8,  
 Gelucire 50/13 121679-13-8, Naratriptan 122320-73-4,  
 Rosiglitazone 123948-87-8, Topotecan 124937-51-5, Tolterodine  
 127779-20-8, Saquinavir 129497-78-5, Verteporfin 129618-40-2,  
 Nevirapine 132539-06-1, Olanzapine 132875-61-7, Remifentanil  
 133040-01-4, Eprosartan 133248-87-0, Maisine 134308-13-7,  
 Tolcapone 134523-00-5, Atorvastatin 134678-17-4, Lamivudine

135062-02-1, Repaglinide 136470-78-5, Abacavir 136817-59-9,  
 Delavirdine 137862-53-4, Valsartan 138402-11-6 139264-17-8,  
 Zolmitriptan 139481-59-7, Candesartan 139755-83-2, Sildenafil  
 144034-80-0, Rizatriptan 144494-65-5, Tirofiban 144701-48-4,  
 Telmisartan 145599-86-6, Cerivastatin 146961-76-4,  
 Alatrofloxacin 147059-72-1, Trovafloxacin 150372-93-3, Glycerol  
 L 150378-17-9, Indinavir 151096-09-2, Moxifloxacin  
 154598-52-4, Efavirenz 155213-67-5, Ritonavir 156259-68-6,  
 Capmul MCM 158747-02-5, Frovatriptan 158966-92-8, Montelukast  
 159989-64-7, Nelfinavir 161814-49-9, Amprenavir 169590-42-5,  
 Celecoxib 185069-68-5, Polyglyceryl oleate stearate 301206-59-7  
 301524-91-4, Captex 810

(pharmaceutical compns. contg. hydrophobic therapeutic agents and  
 carriers contg. ionizing agents and surfactants and  
 triglycerides)

IT 50-70-4, Sorbitol, biological studies 56-81-5, 1,2,3-Propanetriol,  
 biological studies 57-55-6, 1,2-Propanediol, biological studies  
 64-17-5, Ethanol, biological studies 67-63-0, Isopropanol,  
 biological studies 69-65-8, D-Mannitol 71-36-3, Butanol,  
 biological studies 77-89-4, Acetyl triethylcitrate 77-90-7,  
 Acetyl tributyl citrate 77-93-0, Triethylcitrate 77-94-1,  
 Tributylcitrate 100-51-6, Benzenemethanol, biological studies  
 102-76-1, Triacetin 105-37-3, Ethyl propionate 105-54-4, Ethyl  
 butyrate 105-60-2, biological studies 106-32-1, Ethyl caprylate  
 107-21-1, 1,2-Ethanediol, biological studies 115-77-5, biological  
 studies 127-19-5, Dimethylacetamide 502-44-3, 2-Oxepanone  
 542-28-9, .delta.-Valerolactone 616-45-5, 2-Pyrrolidone  
 623-84-7, Propylene glycol diacetate 675-20-7, 2-Piperidone  
 872-50-4, N-Methylpyrrolidone, biological studies 1331-12-0,  
 Propylene glycol monoacetate 2687-91-4, N-Ethylpyrrolidone  
 2687-94-7 2687-96-9 3068-88-0, .beta.-Butyrolactone 3445-11-2  
 9002-89-5, Polyvinylalcohol 9003-39-8, Polyvinylpyrrolidone  
 9004-34-6D, Cellulose, derivs., biological studies 9004-65-3,  
 Hydroxypropyl methylcellulose 9050-36-6, Maltodextrin  
 12619-70-4D, Cyclodextrin, derivs. 25265-75-2, Butanediol  
 25322-68-3 25322-69-4, Polypropylene glycol

(solubilizer; pharmaceutical compns. contg. hydrophobic  
 therapeutic agents and carriers contg. ionizing agents and  
 surfactants and triglycerides)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Blair; US 4306981 A 1981 HCA
- (2) Hauer; US 5342625 A 1994 HCA
- (3) Story; US 4944949 A 1990 HCA

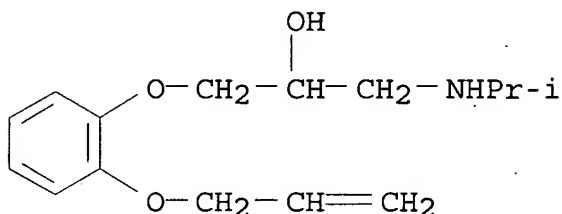
IT 6452-71-7, Oxprenolol 10043-35-3, Boric

acid, biological studies 13655-52-2, Alprenolol

(pharmaceutical compns. contg. hydrophobic therapeutic agents and  
 carriers contg. ionizing agents and surfactants and

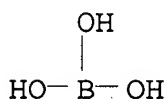
triglycerides)

RN 6452-71-7 HCA

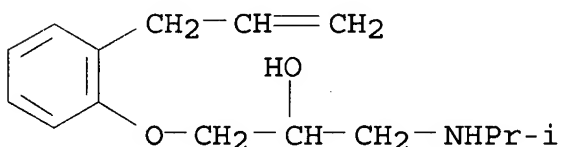
CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyloxy)phenoxy]-  
(9CI) (CA INDEX NAME)

RN 10043-35-3 HCA

CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 13655-52-2 HCA

CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyl)phenoxy]-  
(9CI) (CA INDEX NAME)

L29 ANSWER 4 OF 10 HCA COPYRIGHT 2005 ACS on STN

AN 127:50692 HCA

ED Entered STN: 22 Jul 1997

TI Chiral intramolecular amine-borane complexes as reducing agents for  
prochiral ketones

AU Toumelin, Jean-Brice Le; Baboulene, Michel

CS Laboratoire des IMRCP, UMR 5623 (CNRS), Universite P. Sabatier,  
Toulouse, 31062, Fr.

SO Tetrahedron: Asymmetry (1997), 8(8), 1259-1265

CODEN: TASYE3; ISSN: 0957-4166

PB Elsevier

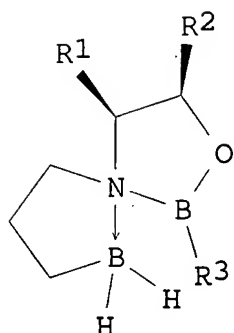
DT Journal

LA English

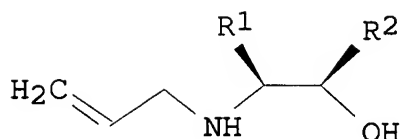
CC 29-4 (Organometallic and Organometalloidal Compounds)

OS CASREACT 127:50692

GI



I



II

- AB A new family of chiral amine-borane complexes, the N-spiroazaborolidines I, were synthesized from reaction of allylaminoethanol II (e.g., R1 = H, Me, R2 = Me, Ph) with R3B(OH)2 (R3 = Me, Ph, H) followed by cyclization with borane dimethylsulfide. I are stable, convenient to use, and are excellent reducing agents of prochiral ketones (yield reduction > 95%). However, poor enantioselectivity was obtained (ee < 38%). The configuration of these mols. (cis position between Baza and the substituent on the Boxaza), unfavorable for a good approach of the ketone, is a possible explanation. These results show the importance of the stereochem. of the N atom in amine-borane complexes for asym. synthesis.
- ST spiroazaborolidine prepn redn prochiral ketone; allylaminoethanol cyclization trimethylboroxin phenylboronic acid; oxazaborolidine prepn spiro cyclization borane dimethylsulfide
- IT Reducing agents  
(chiral intramol. N-spiroazaborolidine complexes as reducing agents for prochiral ketones)
- IT Ketones, reactions  
(chiral intramol. N-spiroazaborolidine complexes as reducing agents for prochiral ketones)
- IT Alcohols, preparation  
(chiral, amino; prepn. and cyclization with trimethylboroxine or phenylboronic acid to give oxazaborolidines)
- IT Asymmetric synthesis and induction  
Configuration  
Stereochemistry

(of chiral intramol. N-spiroazaborolidine complexes as reducing agents for prochiral ketones)

IT 191173-29-2P 191173-30-5P 191173-31-6P 191173-32-7P  
191173-33-8P  
(prepn. and reaction with borane dimethylsulfide to give N-spiroazaborolidine)

IT 191173-27-0P  
(prepn. and reactions with trimethylboroxin or phenylboronic acid to give oxazaborolidines)

IT 108903-01-1P 191173-28-1P  
(prepn. and reactions with trimethylboroxine or phenylboronic acid to give oxazaborolidines)

IT 191173-34-9P 191173-35-0P 191173-36-1P 191173-37-2P  
191173-38-3P 191173-39-4P 191173-40-7P 191173-41-8P  
(prepn. and use as reducing agent for conversion of prochiral ketones to alcs.)

IT 598-75-4P 1445-91-6P 1517-69-7P 1565-74-8P 14898-86-3P  
(prepn. of)

IT 492-41-1  
(reactions with allyl bromide to give chiral allyl aminoethanol)

IT 15448-47-2, reactions 20780-53-4  
(reactions with allylamine to give chiral allyl aminoethanol)

IT 106-95-6, Allyl bromide, reactions  
(reactions with amino alc. to give allyl aminoethanol)

IT 107-11-9, Allylamine  
(reactions with chiral epoxides to give allyl aminoethanol)

IT 98-80-6, Phenylboronic acid 823-96-1, Trimethylboroxin  
13780-71-7, **Boric acid** (HB(OH)<sub>2</sub>)  
(reactions with trimethylboroxin or phenylboronic acid with amino alcs. to give oxazaborolidines)

IT 93-55-0, Ethyl phenyl ketone 98-86-2, Acetophenone, reactions  
563-80-4, 3-Methyl-2-butanone 611-70-1, Isopropyl phenyl ketone  
(redn. by amine-borane complexes to alc.)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

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- (3) Biosym; Module Insight Discover 95
- (4) Brown, H; Acc Chem Res 1992, V25, P16 HCA
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- (6) Cai, D; Tetrahedron Lett 1993, V34(20), P3243 HCA
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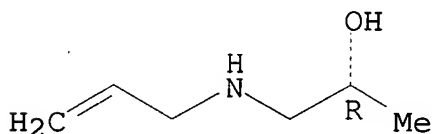
IT 191173-27-0P

(prepn. and reactions with trimethylboroxin or phenylboronic acid to give oxazaborolidines)

RN 191173-27-0 HCA

CN 2-Propanol, 1-(2-propenylamino)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



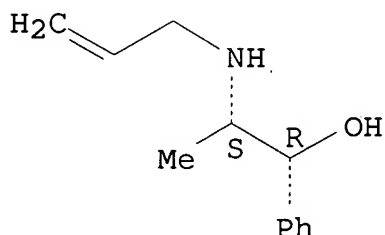
IT 108903-01-1P 191173-28-1P

(prepn. and reactions with trimethylboroxine or phenylboronic acid to give oxazaborolidines)

RN 108903-01-1 HCA

CN Benzenemethanol, .alpha.-[1-(2-propenylamino)ethyl]-, [R-(R\*,S\*)]-(9CI) (CA INDEX NAME)

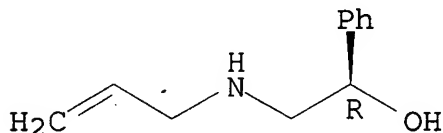
Absolute stereochemistry. Rotation (-).





RN 191173-28-1 HCA  
 CN Benzenemethanol, .alpha.-[(2-propenylamino)methyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L29 ANSWER 5 OF 10 HCA COPYRIGHT 2005 ACS on STN  
 AN 124:116342 HCA  
 ED Entered STN: 21 Feb 1996  
 TI Selective extraction and separation of optical isomers of  
 .beta.-amino alcohol or 1,2-diol  
 IN Nishizawa, Hideyuki; Abe, Yoshihiro  
 PA Japan  
 SO Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C07B057-00  
 ICS C07B057-00; C07B063-00; C07C031-20  
 ICI C07M007-00  
 CC 21-3 (General Organic Chemistry)  
 Section cross-reference(s): 25, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07242569	A2	19950919	JP 1994-58068	19940303
JP 3467709	B2	20031117		
PRAI JP 1994-58068		19940303		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 07242569	ICM	C07B057-00
	ICS	C07B057-00; C07B063-00; C07C031-20
	ICI	C07M007-00

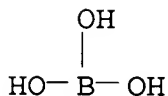
OS MARPAT 124:116342

AB A mixt. of .beta.-amino alc. optical isomers HOCR11R12C(XH)R13R14  
 (I; X = NH, NR101; wherein R101 = org. group; R12 - R14 = H, org.)

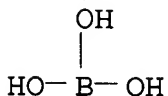
group; at least one of the C atoms bonded to R12 and R13 is an asym. C atom), useful as drugs or its intermediates, is subjected to the liq.-liq. sepn. and extn. between an org. phase and an aq. phase in the presence of **boric acid** and/or **boric acid salt** and an optically active 1,2-diol (resolving agent) or a .beta.-amino alc. HOR22R21CC(NR25R26)R23R24 (R21 = org. group; R22 - R26 = H, or org. group; at least one of the C atoms bonded to R21 and R23 is an asym. C atom) and one of said .beta.-amino alc. optical isomers is selectively extd. and sepd. to one of the liq. phases. Preferably said 1,2-diol is a tartaric acid ester, preferably C alkyl, benzyl, or cyclohexyl ester and said .beta.-amino alc. is pindolol, propranolol, alprenolol, chlorprenaline, bunitrolol, allotinorol, atenolol, and terbutaline. Conversely, a mixt. of 1,2-diol optical isomers is subjected to the liq.-liq. sepn. and extn. between an org. phase and an aq. phase in the presence of **boric acid** and/or **boric acid salt** and an optically active .beta.-amino alc. I (resolving agent) and one of said 1,2-diol optical isomers is selectively extd. and sepd. to one of the liq. phases. Thus, CHCl3, didodecyl L-tartrate (resolving agent, prepn. given) (100 mM in CHCl3), 100 mM **boric acid** soln., and (.+-.)-pindolol (0.5 mM in the total vol. of the 2 liq. phases) were shaken well. The distribution ratio of each optical isomer in the 100 mM **boric acid** layer was 0.790.+-.0.013 and 1.730.+-.0.026 and the sepn. coeff. was 2.19 as compared to 0.75 and 1.75 for a 100 mM acetic acid buffer and a 100 mM phosphoric acid buffer, resp.

- ST beta amino alc resoln; **boric acid** soln selective  
extn sepn; optically active diol resolving agent; tartaric acid  
ester resolving agent
- IT Resolution  
(resoln. of .beta.-amino alc. by selective liq.-liq. extn. and  
sepn. of optical isomers of .beta.-amino alc. in presence of  
optically active 1,2-diol and **boric acid**)
- IT Alcohols, preparation  
(amino, resoln. of .beta.-amino alc. by selective liq.-liq. extn.  
and sepn. of optical isomers of .beta.-amino alc. in presence of  
optically active 1,2-diol and **boric acid**)
- IT 10043-35-3P, **Boric acid**, preparation  
13840-56-7P, Sodium borate  
(aid for resolving agent; resoln. of .beta.-amino alc. by  
selective liq.-liq. extn. and sepn. of optical isomers of  
.beta.-amino alc. in presence of optically active 1,2-diol and  
**boric acid**)
- IT 87-69-4, L-Tartaric acid, reactions 112-53-8, Dodecyl alcohol  
(esterification of tartaric acid with alcs.)
- IT 525-66-6P, Propranolol 13523-86-9P, Pindolol 13655-52-2P  
, Alprenolol

- (resoln. of .beta.-amino alc. by selective liq.-liq. extn. and sepn. of optical isomers of .beta.-amino alc. in presence of optically active 1,2-diol and **boric acid**)
- IT 3811-25-4 23031-25-6, Terbutaline 29122-68-7, Atenolol  
34915-68-9, Bunitrolol 68377-92-4, Arotinolol  
(resoln. of .beta.-amino alc. by selective liq.-liq. extn. and sepn. of optical isomers of .beta.-amino alc. in presence of optically active 1,2-diol and **boric acid**)
- IT 87-92-3P, Dibutyl L-tartrate 622-00-4P, Dibenzyl L-tartrate  
15785-59-8P 66584-29-0P 77459-97-3P  
(resolving agent; resoln. of .beta.-amino alc. by selective liq.-liq. extn. and sepn. of optical isomers of .beta.-amino alc. in presence of optically active 1,2-diol and **boric acid**)
- IT 56-23-5, Carbontetrachloride, uses 67-66-3, Chloroform, uses  
71-36-3, n-Butanol, uses 71-55-6, 1,1,1-Trichloroethane 75-09-2,  
Dichloromethane, uses 107-06-2, 1,2-Dichloroethane, uses  
108-88-3, Toluene, uses 141-78-6, Ethyl acetate, uses  
(solvent; resoln. of .beta.-amino alc. by selective liq.-liq. extn. and sepn. of optical isomers of .beta.-amino alc. in presence of optically active 1,2-diol and **boric acid**)
- IT 10043-35-3P, **Boric acid**, preparation  
13840-56-7P, Sodium borate  
(aid for resolving agent; resoln. of .beta.-amino alc. by selective liq.-liq. extn. and sepn. of optical isomers of .beta.-amino alc. in presence of optically active 1,2-diol and **boric acid**)
- RN 10043-35-3 HCA  
CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)

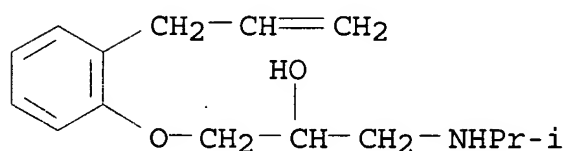


- RN 13840-56-7 HCA  
CN Boric acid (H3BO3), sodium salt (8CI, 9CI) (CA INDEX NAME)



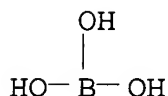
●x Na

IT 13655-52-2P, Alprenolol  
 (resoln. of .beta.-amino alc. by selective liq.-liq. extn. and  
 sepn. of optical isomers of .beta.-amino alc. in presence of  
 optically active 1,2-diol and **boric acid**)  
 RN 13655-52-2 HCA  
 CN 2-Propanol, 1-[(1-methylethyl) amino] -3- [2- (2-propenyl) phenoxy] -  
 (9CI) (CA INDEX NAME)

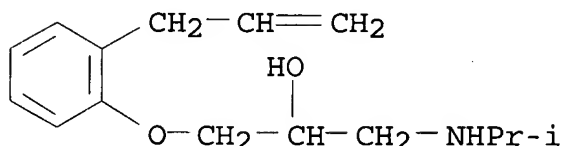


L29 ANSWER 6 OF 10 HCA COPYRIGHT 2005 ACS on STN  
 AN 123:198072 HCA  
 ED Entered STN: 07 Oct 1995  
 TI Enantioselective distribution of amino-alcohols in a liquid-liquid  
 two-phase system containing dialkyl L-tartrate and **boric  
 acid**  
 AU Abe, Yoshihiro; Shoji, Tomoko; Kobayashi, Michi; Qing, Wang; Asai,  
 Naoko; Nishizawa, Hideyuki  
 CS Kyoritsu Coll. Pharmacy, Tokyo, 105, Japan  
 SO Chemical & Pharmaceutical Bulletin (1995), 43(2), 262-5  
 CODEN: CPBTAL; ISSN: 0009-2363  
 PB Pharmaceutical Society of Japan  
 DT Journal  
 LA English  
 CC 22-3 (Physical Organic Chemistry)  
 AB Racemic amino alcs. such as pindolol, propranolol, alprenolol and  
 bucumolol enantiomers exhibited different distribution behaviors in  
 a two-phase system consisting of a chloroform soln. of didodecyl  
 L-tartrate and an aq. soln. of **boric acid**. It  
 seemed that a borate complex of the 1,2-diol group of the tartrate  
 and the amino alc. was formed in the system. In the case of  
 pindolol, one enantiomer was preferentially extd. into the org.  
 phase (.times.2.20) at equil.  
 ST enantioselective distribution amino alc liq liq; tartrate  
**boric acid** resoln amino alc.  
 IT Resolution  
 (enantioselective distribution of amino alcs. in a liq.-liq.  
 two-phase system contg. dialkyl L-tartrate and **boric  
 acid**)  
 IT Alcohols, processes  
 (amino, enantioselective distribution of amino alcs. in a  
 liq.-liq. two-phase system contg. dialkyl L-tartrate and

- boric acid)**
- IT 87-91-2, Diethyl L-tartrate 608-68-4, Dimethyl L-tartrate 622-00-4, Dibenzyl L-tartrate 10043-35-3, **Boric acid (H3BO3)**, uses  
(enantioselective distribution of amino alcs. in a liq.-liq. two-phase system contg. dialkyl L-tartrate and **boric acid**)
- IT 87-92-3P, Dibutyl L-tartrate 2217-14-3P 15785-59-8P 66584-29-0P 77459-97-3P  
(enantioselective distribution of amino alcs. in a liq.-liq. two-phase system contg. dialkyl L-tartrate and **boric acid**)
- IT 525-66-6, Propranolol 13523-86-9, Pindolol 13655-52-2 58409-59-9, Bucumolol  
(enantioselective distribution of amino alcs. in a liq.-liq. two-phase system contg. dialkyl L-tartrate and **boric acid**)
- IT 10043-35-3, **Boric acid (H3BO3)**, uses  
(enantioselective distribution of amino alcs. in a liq.-liq. two-phase system contg. dialkyl L-tartrate and **boric acid**)
- RN 10043-35-3 HCA
- CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)



- IT 13655-52-2  
(enantioselective distribution of amino alcs. in a liq.-liq. two-phase system contg. dialkyl L-tartrate and **boric acid**)
- RN 13655-52-2 HCA
- CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyl)phenoxy]-(9CI) (CA INDEX NAME)



ED Entered STN: 15 Oct 1994

TI Introduction of migration indices for identification: chiral separation of some .beta.-blockers by using cyclodextrins in micellar electrokinetic capillary chromatography

AU Siren, Heli; Jumppanen, Juho H.; Manninen, Kirsi; Riekkola, Marja-Liisa

CS Dep. Chem., Univ. Helsinki, Finland

SO Electrophoresis (1994), 15(6), 779-84  
CODEN: ELCTDN; ISSN: 0173-0835

DT Journal

LA English

CC 64-3 (Pharmaceutical Analysis)  
Section cross-reference(s): 1

AB Because of the different physiol. impact that stereoisomers may have, it is often vital to sep. these forms from one another. Because of their structural similarity, the sepn. is usually difficult to achieve and zones may elute very close to each other. This is a particular problem in capillary electrophoresis, where the repeatability of abs. migration times is fairly poor, mainly due to the irreproducibility of the electroosmotic flow. The sepn. is usually repeatable, however, and when the disturbing effects are eliminated by using a migration index system incorporating two marker compds. the identification of the enantiomers becomes extremely good. Relative std. deviation (RSD) values less than 0.1% for the migration index of each enantiomer were obtained in both intra-day and day-to-day (6 days) studies. The best sepn. was achieved with the electrolyte soln. made of 40 mM borate, 32 mM sodium dodecyl sulfate (SDS), 12 mM .beta.-cyclodextrin (.beta.-CD), and 6 mM .alpha.-cyclodextrin (.alpha.-CD) at pH 9.3.

ST beta blocker chiral sepn; micellar electrokinetic capillary chromatog beta blocker

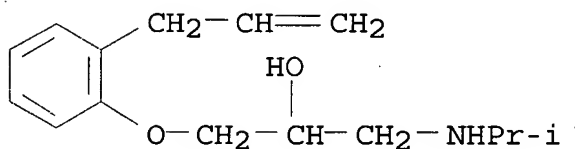
IT Resolution  
(chromatog., migration indexes in chiral sepn. of .beta.-blockers using cyclodextrins in micellar electrokinetic capillary chromatog.)

IT Chromatography, column and liquid  
(electrokinetic micellar, capillary, migration indexes in chiral sepn. of .beta.-blockers using cyclodextrins in micellar electrokinetic capillary chromatog.)

IT Adrenergic antagonists  
(.beta.-, migration indexes in chiral sepn. of .beta.-blockers using cyclodextrins in micellar electrokinetic capillary chromatog.)

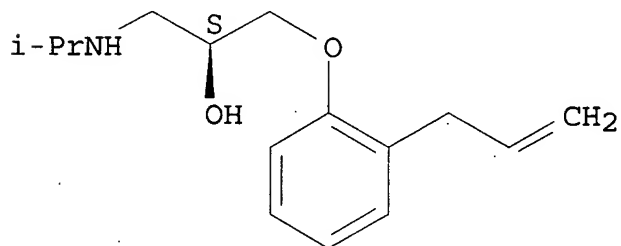
IT 525-66-6, (.+-.)-Propranolol 4199-09-1, (-)-Propranolol  
5051-22-9, (+)-Propranolol 13655-52-2, (.+-.)-Alprenolol  
23846-71-1, (-)-Alprenolol 23846-72-2,  
(+)-Alprenolol 29122-68-7, (.+-.)-Atenolol 56715-13-0,  
(+)-Atenolol 93379-54-5, (-)-Atenolol

- (migration indexes in chiral sepn. of .beta.-blockers using cyclodextrins in micellar electrokinetic capillary chromatog.)
- IT 151-21-3, Sodium dodecyl sulfate, analysis 7585-39-9,  
 .beta.-Cyclodextrin 10016-20-3, .alpha.-Cyclodextrin  
 10043-35-3, **Boric acid**, analysis  
 (migration indexes in chiral sepn. of .beta.-blockers using cyclodextrins in micellar electrokinetic capillary chromatog.)
- IT 13655-52-2, (.+-.)-Alprenolol 23846-71-1,  
 (-)-Alprenolol 23846-72-2, (+)-Alprenolol  
 (migration indexes in chiral sepn. of .beta.-blockers using cyclodextrins in micellar electrokinetic capillary chromatog.)
- RN 13655-52-2 HCA  
 CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyl)phenoxy]-  
 (9CI) (CA INDEX NAME)



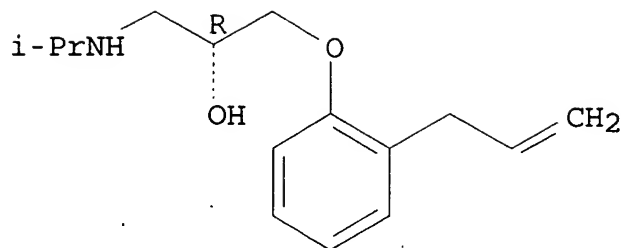
- RN 23846-71-1 HCA  
 CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyl)phenoxy]-,  
 (2S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

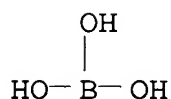


- RN 23846-72-2 HCA  
 CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyl)phenoxy]-,  
 (2R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 10043-35-3, **Boric acid**, analysis  
 (migration indexes in chiral sepn. of .beta.-blockers using  
 cyclodextrins in micellar electrokinetic capillary chromatog.)  
 RN 10043-35-3 HCA  
 CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)



L29 ANSWER 8 OF 10 HCA COPYRIGHT 2005 ACS on STN  
 AN 120:200438 HCA  
 ED Entered STN: 16 Apr 1994  
 TI Controlled-release transdermal pharmaceuticals containing cryogels  
 IN Wood, Louis L.; Calton, Gary J.  
 PA SRCHEM Inc., USA  
 SO U.S., 15 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM A61L015-16  
 INCL 424447000  
 CC 63-6 (Pharmaceuticals)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 5260066	A	19931109	US 1992-821627	199201 16
	US 5288503	A	19940222	US 1992-899369	199206 16
PRAI	US 1992-821627	A3	19920116		
CLASS					
	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		



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US 5260066 ICM A61L015-16  
INCL 424447000

US 5260066 NCL 424/447.000; 424/443.000; 424/445.000;  
424/486.000

US 5288503 NCL 424/497.000; 424/078.100; 424/078.120;  
424/078.130

AB A controlled-release transdermal pharmaceutical contg. therapeutic agents in a poly(vinyl alc.) (I) cryogel is disclosed. A slurry of 11.0 mg ciprofloxacin.HCl (II) and 200 mg 10% I was warmed to 50-60.degree. to obtain a clear homogeneous soln. The soln. was then placed in a mold and subjected to 6 freeze-thaw cycles to give a white opaque elastomeric cryogel having 15mm diam. and 0.5mm thickness. The release of II from the gel in 0.9% NaCl was 74% in th 1st 4 hs and it was const. in the subsequent 5-24 hs.

ST controlled release transdermal pharmaceutical cryogel; ciprofloxacin polyvinyl alc cryogel transdermal pharmaceutical

IT Vitamins  
(J, controlled-release transdermal pharmaceuticals contg. cryogels and)

IT Manganins (proteins)  
Thyroglobulins  
(controlled-release transdermal pharmaceuticals contg. cryogels and)

IT Quaternary ammonium compounds, biological studies  
(alkylbenzyltrimethyl, chlorides, controlled-release transdermal pharmaceuticals contg. cryogels and)

IT Animal growth regulators  
(blood platelet-derived growth factors, controlled-release transdermal pharmaceuticals contg. cryogels and)

IT Agglutinins and Lectins  
(cecropins, controlled-release transdermal pharmaceuticals contg. cryogels and)

IT Gels  
(cryogenic, controlled-release transdermal pharmaceuticals 60contg. therapeutic agents and)

IT Pharmaceutical natural products  
(digitalis, controlled-release transdermal pharmaceuticals contg. cryogels and)

IT Animal growth regulators  
(epithelium-derived growth factors, controlled-release transdermal pharmaceuticals contg. cryogels and)

IT Fatty acids, biological studies  
(essential, controlled-release transdermal pharmaceuticals contg. cryogels and)

IT Pharmaceutical dosage forms  
(transdermal, controlled-release, cryogels and therapeutic agents in)

IT 50-00-0, Formaldehyde, biological studies 50-02-2, Dexamethasone  
 50-06-6, biological studies 50-07-7, Mitomycin C 50-18-0,  
 Cytosan 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-48-6,  
 Amitriptyline 50-49-7, Imipramine 50-52-2, Thioridazine  
 50-53-3, Chlorpromazine, biological studies 50-56-6, Oxytocin,  
 biological studies 50-76-0, Actinomycin D 50-78-2 50-81-7,  
 Vitamin C, biological studies 51-05-8, Procaine hydrochloride  
 51-21-8, 5-Fluorouracil 51-34-3, Scopolamine 51-41-2,  
 Levarterenol 51-43-4, Epinephrine 51-48-9, Thyroxine, biological  
 studies 51-64-9, Dextroamphetamine 51-77-4, Gefarnate 52-53-9,  
 Verapamil 52-86-8, Haloperidol 53-03-2, Prednisone 53-06-5,  
 Cortisone 54-31-9, Furosemide 54-42-2, Idoxuridine 54-85-3,  
 Isoniazide 54-91-1, Pipobroman 55-63-0 56-40-6, Glycine,  
 biological studies 56-41-7, Alanine, biological studies 56-45-1,  
 Serine, biological studies 56-54-2, Quinidine 56-75-7,  
 Chloramphenicol 56-84-8, Aspartic acid, biological studies  
 56-85-9, Glutamine, biological studies 56-86-0, Glutamic acid,  
 biological studies 56-87-1, Lysine, biological studies 57-27-2,  
 Morphine, biological studies 57-41-0, Phenytoin 57-42-1,  
 Meperidine 57-66-9, Probenecid 57-92-1, Streptomycin, biological  
 studies 58-08-2, biological studies 58-14-0, Pyrimethamine  
 58-32-2, Dipyridamole 58-40-2, Promazine 58-54-8, Ethacrynic  
 acid 58-55-9, Theophylline, biological studies 58-73-1,  
 Diphenhydramine 58-74-2, Papaverine 58-93-5 59-01-8, Kanamycin  
 59-05-2, Methotrexate 59-33-6 59-46-1, Procaine 59-87-0  
 59-92-7, Levodopa, biological studies 60-54-8, Tetracycline  
 61-25-6, Papaverine hydrochloride 61-32-5, Methicillin 61-33-6,  
 preparation 61-72-3, Cloxacillin 61-90-5, L-Leucine, biological  
 studies 62-31-7, Dopamine hydrochloride 62-97-5, Diphenamil  
 63-68-3, Methionine, biological studies 63-91-2, Phenylalanine,  
 biological studies 64-17-5, Ethanol, biological studies 65-49-6  
 66-79-5, Oxacillin 67-63-0, Isopropanol, biological studies  
 68-88-2, Hydroxyzine 69-23-8, Fluphenazine 69-43-2, Prenylamine  
 lactate 69-53-4, Ampicillin 69-72-7, biological studies  
 70-00-8, Trifluridine 70-30-4, Hexachlorophene 71-00-1,  
 Histidine, biological studies 72-19-5, Threonine, biological  
 studies 72-44-6, Methaqualone 72-69-5 73-22-3, Tryptophan,  
 biological studies 73-32-5, Isoleucine, biological studies  
 73-48-3 74-79-3, Arginine, biological studies 76-99-3, Methadone  
 77-07-6, Levorphanol 77-19-0, Dicyclomine 77-21-4, Glutethimide  
 78-11-5, Pentaerythritol tetranitrate 79-57-2, Oxytetracycline  
 81-23-2, Dehydrocholic acid 83-88-5, Vitamin G, biological studies  
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Vancomycin 1405-87-4, Bacitracin 1405-97-6, Gramacidin  
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Cerium, salts 7440-66-6D, Zinc, salts 7487-94-7, Mercuric  
chloride, biological studies 7542-37-2 7722-64-7, Potassium

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(controlled-release transdermal pharmaceuticals contg. cryogels  
and)

IT 8049-47-6, Pancreatin 9001-09-6, Chymopapain 9001-12-1,  
Collagenase 9001-73-4, Papain 9001-75-6, Pepsin 9001-90-5,  
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hydrochloride 29975-16-4, Estazolam 30516-87-1, AZT  
30685-43-9, Metildigoxin 32887-01-7, Amdinocillin 33069-62-4,  
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34580-13-7, Ketotifen 34787-01-4 34915-68-9, Bunitrolol  
35607-66-0, Cefoxitin 37091-66-0, Azlocillin 37517-28-5,

Amikacin 38194-50-2, Sulindac 38821-53-3, Cephradine  
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 50972-17-3, Bacampicillin 51384-51-1, Metoprolol 51481-61-9,  
 Cimetidine 51481-65-3, Mezlocillin 51781-21-6, Carteolol  
 hydrochloride 51940-44-4, Pipemidic acid 53608-75-6,  
 Pancrelipase 53902-12-8, Tranilast 53994-73-3, Cefaclor  
 54527-84-3, Nicardipine hydrochloride 55268-75-2, Cefuroxime  
 55985-32-5, Nicardipine 56391-56-1, Netilmicin 56392-17-7,  
 Metoprolol tartrate 58001-44-8 59128-97-1, Haloxazolam  
 59277-89-3, Acyclovir 60925-61-3, Ceforanide 61270-58-4,  
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 82009-34-5, Cilastatin 82030-87-3, Somatrem 82410-32-0,  
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 118857-69-5D, alkyl derivs. 135968-09-1, RG-CSF 139639-23-9  
 150977-36-9, Bromelain

(controlled-release transdermal pharmaceuticals contg. cryogels  
 and)

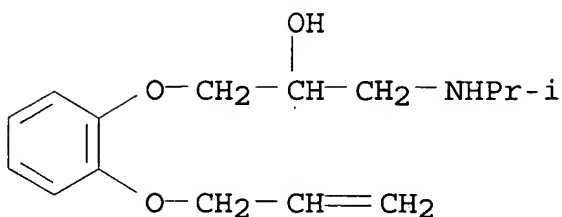
IT 6452-73-9, Oxprenolol hydrochloride 10043-35-3,

Boric acid, biological studies

(controlled-release transdermal pharmaceuticals contg. cryogels  
 and)

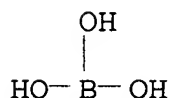
RN 6452-73-9 HCA

CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyloxy)phenoxy]-,  
 hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 10043-35-3 HCA  
CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)



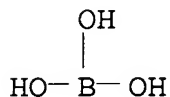
L29 ANSWER 9 OF 10 HCA COPYRIGHT 2005 ACS on STN  
AN 119:219240 HCA  
ED Entered STN: 27 Nov 1993  
TI The yeast test: an alternative method for the testing of acute toxicity of drug substances and environmental chemicals  
AU Koch, Heinrich P.; Hofeneder, Maria; Bohne, Bernd  
CS Inst. Pharm. Chem., Univ. Vienna, Vienna, Austria  
SO Methods and Findings in Experimental and Clinical Pharmacology (1993), 15(3), 141-52  
CODEN: MFEPDX; ISSN: 0379-0355  
DT Journal  
LA English  
CC 4-1 (Toxicology)  
Section cross-reference(s): 1, 10  
AB A novel testing procedure has been developed with the aim to replace the traditional LD50 test in vertebrates by a method using a non-pain sensitive organism. Several years of practical experience have proven this method to be a rather quick, simple, inexpensive, outstandingly well reproducible and reliable exptl. technique which yields an est. for the acute toxicity of drugs, environmental chems., solvents, food additives, pesticides, industrial and waste products, and the like. The model is equiv. to the customary LD50 test in mice, rats and other lab. animals. The yeast test, as it has been briefly named, employs ordinary yeast (*Saccharomyces cerevisiae*) in a thermostated incubation mixt. with nutrients and trace elements. The test substance is added to this mixt. by increasing concn., and the effect upon the growth rate of the yeast cells is monitored at 30, 90, 150 and 210 min after beginning the expt. by counting the cell no., either in a simple counting chamber under the microscope or, more conveniently, by using an electronic Coulter counter. The effect is expressed as percent growth of the cells in relation to the untreated control. Evaluation of the exptl. data leads to a general toxicity parameter, the mean inhibitory concn. or IC50 value of the compd. under test. Hitherto it was found that the IC50 values of approx. 160 common drugs and other chems. correlate well with the known LD50 values found in animals with the same substances.  
ST toxicity drug environmental chem yeast test; *Saccharomyces* drug environmental chem toxicity test

- IT Microorganism growth  
(by yeast, in testing of toxicity of drugs and environmental  
chems.)
- IT Saccharomyces cerevisiae  
(for testing of toxicity of drugs and environmental chems.)
- IT Toxicity  
(of drugs and environmental chems., testing of, yeast for)
- IT Bioassay  
(yeast, for testing of toxicity of drugs and environmental  
chems.)
- IT Quaternary ammonium compounds, biological studies  
(alkylbenzyltrimethyl, chlorides, toxicity of, testing of, yeast  
for)
- IT Chemicals  
(environmental, toxicity of, testing of, yeast for)
- IT 121-33-5  
(toxicity of, testing of, yeast test for)
- IT 50-00-0, Formaldehyde, biological studies 50-35-1, Thalidomide  
50-47-5, Desipramine 50-48-6 50-49-7, Imipramine 50-52-2,  
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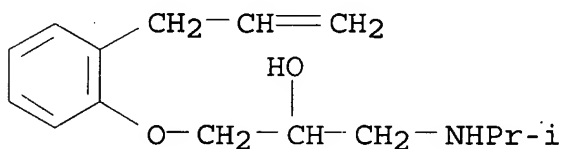
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(toxicity of, testing of, yeast test for)  
 IT 10043-35-3, Boric acid, biological  
 studies 13655-52-2, Alprenolol  
 (toxicity of, testing of, yeast test for)  
 RN 10043-35-3 HCA  
 CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 13655-52-2 HCA  
 CN 2-Propanol, 1-[(1-methylethyl)amino]-3-[2-(2-propenyl)phenoxy]-  
 (9CI) (CA INDEX NAME)



L29 ANSWER 10 OF 10 HCA COPYRIGHT 2005 ACS on STN  
 AN 91:47350 HCA  
 ED Entered STN: 12 May 1984  
 TI Light-sensitive multicomponent emulsion for diazo materials  
 IN Kroupa, Jaroslav; Chmatal, Vladimir; Gorgon, Oldrich; Matous,  
 Vladimir  
 PA Czech.  
 SO Czech., 3 pp.  
 CODEN: CZXXA9  
 DT Patent  
 LA Czech  
 IC G03C005-18  
 CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic  
 Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 173741	B	19770331	CS 1972-8495	197212 12
PRAI	CS 1972-8495	A	19721212		

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

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CS 173741 IC G03C005-18

AB Dialkylphenolsulfonic acids are cheaper passive coupling components than the commonly used dialkylaminomethylxylenols and give with the usual additives black images of equal brilliance. Thus, a soln. of tartaric acid 3, thiourea 6, 2-hydroxy-3-naphthoic acid .beta.-aminoethylamide 1.9, 3,5-dimethylphenol-4-sulfonic acid 1.8, HCO<sub>2</sub>H 1.2, and 1-diazo-4-ethylhydroxyethylaminobenzene (ZnCl<sub>2</sub> complex) 4.2 g in distd. water 100 mL was coated on a paper support. The dry material was then exposed and developed in NH<sub>3</sub> vapors to give a black image on a white background.

ST alkylphenolsulfonic acid coupler diazo copying

IT Diazo process  
(dialkylphenolsulfonic acids as passive couplers in)

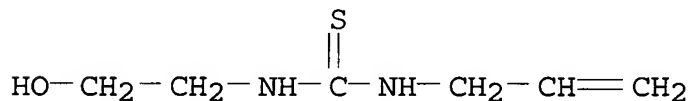
IT 57-13-6, uses and miscellaneous 62-56-6, uses and miscellaneous 64-18-6, uses and miscellaneous 77-92-9, properties 87-69-4, properties 92-27-3 105-81-7 5149-85-9 6014-68-2 10043-35-3, uses and miscellaneous 14751-97-4 26889-86-1  
(diazo copying materials contg. dialkylphenolsulfonic acid passive couplers and)

IT 14982-58-2 70404-74-9 70404-75-0  
(diazo copying materials contg., as passive coupler)

IT 105-81-7 10043-35-3, uses and miscellaneous  
(diazo copying materials contg. dialkylphenolsulfonic acid passive couplers and)

RN 105-81-7 HCA

CN Thiourea, N-(2-hydroxyethyl)-N'-2-propenyl- (9CI) (CA INDEX NAME)



RN 10043-35-3 HCA

CN Boric acid (H<sub>3</sub>BO<sub>3</sub>) (6CI, 8CI, 9CI) (CA INDEX NAME)

